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10/082,196	02/25/2002	Alexander N. Knight	29766-68964	8697

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EXAMINER

EL CHANTI, HUSSEIN A

ART UNIT	PAPER NUMBER
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2457

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/082,196	Applicant(s) KNIGHT ET AL.	
	Examiner HUSSEIN A. EL CHANTI	Art Unit 2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

.DETAILED ACTION

1. This action is responsive to amendment received on Feb. 2, 2009. Claims 1-95 are pending examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 18, 25-27 and 51-62 and 71-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurne et al., U.S. Patent No. 6,181,992 (referred to hereafter as Gurne) in view of Funkhouser et al., U.S. Patent No. 6,925,368 (referred to hereafter as Funkhouser).

As to claims 1 and 28, Gurne teaches an adapter for allowing communications between a vehicle control computer coupled to a vehicle communications network and a remote computer, the adapter comprising:

a first interface configured for operatively coupling to a first network segment of the vehicle communications network, the first network segment configured for communications according to a first protocol (see col. 3 lines 44-62, handheld device interface with the vehicle); and

a second interface configured for operatively coupling to a second network segment of the vehicle communications network, the second network segment

configured for communications according to a second protocol according to a protocol different from the J1939 network (see col. 4 lines 24-64, scanner connects to vehicle using a plurality of cables and associated protocols); and

a third interface including a serial bus controller having a SERIAL BUS device port and a SERIAL BUS host port, the third interface configured for operatively coupling to the remote computer via the SERIAL BUS device port and the SERIAL BUS host port (see col. 3 lines 44-62, handheld device interfaces with the master station);

wherein the vehicle control computer and the remote computer communicate via one of the first network segment through the first and third interfaces and the second network segment through the second and third interfaces (see col. 3 lines 44-62 and col. 2 lines 23-62).

Gunre does not explicitly teach that the serial bus is a USB. Funkhouser, however, teaches a system including a scanner 12 that is connected to a remote computer 26 using a USB device port (see fig. 1-2 and col. 8 lines 46-63). It would have been obvious for one of the ordinary skill in the art at the time of the invention to install the USB device port in the scanner of Gunre to connect to a remote computer as taught by Funkhouser. Motivation to do so comes from the knowledge well known in the art that using a USB connection to communicate between two devices would provide a faster communication and would therefore make the system more efficient.

As to claim 2, Gunre teaches the adapter of claim 1, wherein the remote computer is a personal digital assistant having a SERIAL BUS device port, and wherein

the SERIAL BUS device port of the personal digital assistant is operatively coupled to the SERIAL BUS host port of the serial bus controller (see col. 4 lines 41-64).

As to claim 3, Gurne teaches the adapter of claim 2, wherein the remote computer comprises service tool software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 4, Gurne teaches the adapter of claim 2, wherein the remote computer comprises vehicle diagnostic software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 5, Gurne teaches the adapter of claim 1, wherein the remote computer is a personal computer having a SERIAL BUS host port, and wherein the SERIAL BUS host port of the personal computer is operatively coupled to the SERIAL BUS device port of the serial bus controller (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 6, Gurne teaches the adapter of claim 5, wherein the remote computer comprises service tool software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 7, Gurne teaches the adapter of claim 5, wherein the remote computer comprises vehicle diagnostic software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 8, Gurne teaches the adapter of claim 1, wherein the SERIAL BUS host port of the serial bus controller is configured for coupling with a plurality of remote computers, each of the plurality of remote computers having a SERIAL BUS device port

(see col. 4 lines 24-40).

As to claim 9, Gurne teaches the adapter of claim 8, wherein at least one of the plurality of remote computers comprises vehicle diagnostic or service tool software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 18, Gurne teaches the adapter of claim 1, the adapter further comprising a third interface configured for operatively coupling to a second remote computer, wherein the third interface comprises an RS-232 serial port (see col. 12 lines 39-col. 13 lines 8).

As to claim 25, Gurne teaches the adapter of claim 1, wherein the serial bus controller further comprises a SERIAL BUS On-The-Go port (see col. 3 lines 43-col. 5 lines 25).

As to claim 26, Gurne teaches the adapter of claim 25, wherein the remote computer is a personal digital assistant having a SERIAL BUS device port, and wherein the SERIAL BUS device port of the personal digital assistant is operatively coupled to the SERIAL BUS On-The-Go port of the serial bus controller (see col. 3 lines 43-col. 5 lines 25).

As to claim 27, Gurne teaches the adapter of claim 25, wherein the remote computer is a personal computer having a SERIAL BUS host port, and wherein the SERIAL BUS host port of the personal computer is operatively coupled to the SERIAL BUS On-The-Go port of the serial bus controller (see col. 3 lines 43-col. 5 lines 25).

Claims 51-62 and 71-77 have similar limitations as claims 1-9, 18 and 25-27 and therefore are rejected for similar reasons.

3. Claims 10-17, 19-24, 28-50, 36-43, 63-70 and 78-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurne in view of Funkhouser and further in view of Hullinger, U.S. Patent No. 6,430,485.

As to claims 10-17 and 19-24, Gurne teaches an adapter for allowing communications between a vehicle control computer coupled to a vehicle communications network and a remote computer, the adapter comprising:

a first interface configured for operatively coupling to the vehicle communications network (see col. 3 lines 44-62, handheld device interface with the vehicle); and

a second interface including a serial bus controller having a SERIAL BUS device port and a SERIAL BUS host port, the second interface configured for operatively coupling to the remote computer via the SERIAL BUS device port and the SERIAL BUS host port (see col. 3 lines 44-62, handheld device interfaces with the master station);

wherein the vehicle control computer and the remote computer communicate via the vehicle communications network and the first and second interfaces (see col. 3 lines 44-62 and col. 2 lines 23-62).

Neither Gurne nor Funkhouser teach that the communication networks are J1939 and J1587 networks.

Hullinger teaches a system and method for connecting to a J1587 and J1939 networks installed in a vehicle and reading data from devices connected to these

networks. It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Gunre by connecting the handheld device to a J1587 and J1939 networks as in Hullinger. Motivation to do so comes from the knowledge well known in the art that because j1939 and j1587 are very well known and very widely used protocols which would make the system of Gunre compatible with most vehicle systems.

As to claim 78, Gunre teaches an adapter for allowing communications between control computers of a vehicle and a remote computer, the adapter comprising: a first interface configured for operatively coupling to a network segment of the vehicle; a second interface configured for operatively coupling to a network segment of the vehicle; and a third interface including a SERIAL BUS On-The-Go port, the third interface configured for operatively coupling to the remote computer via the SERIAL BUS On-The-Go port; wherein each control computer of the vehicle and the remote computer communicate via one of the network and the first and third interfaces, and the network and the second and third interfaces (see col. 2 lines 23-62 and col. 3 lines 44-62, handheld device interface with the vehicle handheld and device interfaces with the master station).

Gunre does not explicitly teach that the serial bus is a USB. Funkhouser, however, teaches a system including a scanner 12 that is connected to a remote computer 26 using a USB device port (see fig. 1-2 and col. 8 lines 46-63). It would have been obvious for one of the ordinary skill in the art at the time of the invention to install the USB device port in the scanner of Gunre to connect to a remote computer as taught

by Funkhouser. Motivation to do so comes from the knowledge well known in the art that using a USB connection to communicate between two devices would provide a faster communication and would therefore make the system more efficient.

Hullinger teaches a system and method for connecting to a J1587 and J1939 networks installed in a vehicle and reading data from devices connected to these networks. It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Gurne by connecting the handheld device to a J1587 and J1939 networks as in Hullinger. Motivation to do so comes from the knowledge well known in the art that because j1939 and j1587 are very well known and very widely used protocols which would make the system of Gurne compatible with most vehicle systems.

As to claim 79, Gurne teaches the adapter of claim 78, wherein the remote computer is a personal digital assistant having a SERIAL BUS device port, and wherein the SERIAL BUS device port of the personal digital assistant is operatively coupled to the SERIAL BUS host port of the serial bus controller (see col. 4 lines 41-64).

As to claim 80, Gurne teaches the adapter of claim 79, wherein the remote computer comprises service tool software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 81, Gurne teaches the adapter of claim 79, wherein the remote computer comprises vehicle diagnostic software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 82, Gurne teaches the adapter of claim 78, wherein the remote

computer is a personal computer having a SERIAL BUS host port, and wherein the SERIAL BUS host port of the personal computer is operatively coupled to the SERIAL BUS device port of the serial bus controller (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 83, Gurne teaches the adapter of claim 82, wherein the remote computer comprises service tool software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 84, Gurne teaches the adapter of claim 82, wherein the remote computer comprises vehicle diagnostic software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 85, Gurne teaches the adapter of claim 78, wherein the SERIAL BUS host port of the serial bus controller is configured for coupling with a plurality of remote computers, each of the plurality of remote computers having a SERIAL BUS device port (see col. 4 lines 24-40).

As to claims 86-87, Gurne teaches the adapter of claim 85, wherein at least one of the plurality of remote computers comprises vehicle diagnostic or service tool software (see col. 3 lines 44-62 and col. 2 lines 23-62).

As to claim 88, Gurne teaches the adapter of claim 78, the adapter further comprising a third interface configured for operatively coupling to a second remote computer, wherein the third interface comprises an RS-232 serial port (see col. 12 lines 39-col. 13 lines 8).

As to claim 89, Gurne teaches the adapter of claim 88, wherein the second remote computer is a personal digital assistant having an RS-232 serial port, and wherein the RS-232 serial port of the personal digital assistant is operatively coupled to the RS-232 serial port of the adapter (see col. 12 lines 39-col. 13 lines 8).

As to claim 90, Gurne teaches the adapter of claim 89, wherein the second remote computer comprises service tool software (see col. 3 lines 43-col. 5 lines 25).

As to claim 91, Gurne teaches the adapter of claim 89, wherein the second remote computer comprises vehicle diagnostic software (see col. 3 lines 43-col. 5 lines 25).

As to claim 92, Gurne teaches the adapter of claim 88, wherein the second remote computer is a personal computer having an RS-232 serial port, and wherein the RS-232 serial port of the personal computer is operatively coupled to the RS-232 serial port of the adapter (see col. 3 lines 43-col. 5 lines 25).

As to claim 93, Gurne teaches the adapter of claim 92, wherein the second remote computer comprises service tool software (see col. 3 lines 43-col. 5 lines 25).

As to claim 94, Gurne teaches the adapter of claim 92, wherein the second remote computer comprises vehicle diagnostic software (see col. 3 lines 43-col. 5 lines 25).

As to claim 95, Gurne teaches the adapter of claim 78, wherein the serial bus controller further comprises a SERIAL BUS On-The-Go port (see col. 3 lines 43-col. 5

lines 25).

Claims 28-50 and 63-70 have similar limitations as claims 10-17, 19-24 and 78-95 and therefore are rejected for similar reasons.

3. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejection.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUSSEIN A. EL CHANTI whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hussein Elchanti
April 10, 2009

/Salad Abdullahi/
Primary Examiner, Art Unit 2457